NORTH DAKOTA
STATE DEPARTMENT OF HEALTH
AND CONSOLIDATED LABORATORIES
State Capitol
Bismarck, North Dakota 58505



ENVIRONMENTAL HEALTH SECTION

1200 Missouri Avenue
P.O. Box 5520
Bismarck, North Dakota 58502-5520

# AIR POLLUTION CONTROL
# PERMIT TO OPERATE

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota, and in reliance on statements and representations heretofore made by the owner designated below, a Permit to Operate is hereby issued authorizing such owner to operate the source unit(s) at the location designated below. This Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota State Department of Health and Consolidated Laboratories and to any conditions specified below:

| | |
|---|---|
| 1. Owner:<br><br>A. Name<br>Basin Electric Power Cooperative<br><br>B. Address<br>1717 E Interstate Ave.<br>Bismarck, ND 58501-0564 | 2. Permit Number<br>730004<br><br>3. Installation<br><br>Leland Olds Station<br><br>4. Installation Location<br><br>Stanton, North Dakota<br>Mercer County |

5. Expiration Date:

May 8, 1993

6. Source Unit(s):

A. Unit #1, lignite-fired steam electric power generation plant consisting of the following:

1) One Babcock and Wilcox pulverized coal-fired boiler with a rated heat input capacity of 2310 x $10^6$ BTU/hr equipped with the following air pollution control and monitoring equipment:

a. One Research Cottrell electrostatic precipitator designed for a gas capacity of 1,000,000 ACFM with a design efficiency of 99.5%.

b. One Lear Siegler RM4200 continuous emission monitor to measure opacity.

**EXHIBIT C**

B. Unit #2, lignite-fired steam electric power generation plant consisting of the following:

1) One Babcock and Wilcox cyclone boiler with a rated heat input capacity of 4556 x $10^6$ BTU/hr equipped with the following air pollution control and monitoring equipment:

a. Two Western Precipitator Division, Joy Manufacturing Company electrostatic precipitators designed for a combined gas capacity of 2,100,000 ACFM and a design efficiency of 99.05%.

b. One Lear Siegler RM4200 continuous emission monitor to measure opacity.

C. A 1500 ton/hour lignite coal handling system for Source Units A. and B. equipped with the following air pollution control equipment:

1) One #16 W-D American Air Filter rotoclone for the transfer tower.

2) One #16 W-D and one #20 W-D American Air Filter rotoclone for the two reclaim tunnels.

3) Two #16 W-D American Air Filter rotoclones for the crusher house.

4) One #24 W-D and one #27 W-D American Air Filter rotoclone for the two bunker house transfer conveyors on Source Unit B.

5) Two #24 W-A American Air Filter rotoclones for east and west bunker ventilation on Source Unit B.

6) Two #16 W-D American Air Filter rotoclones for the two bunker loading conveyors on Source Unit A.

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CONDITIONS

7. A. The maximum allowable emission rates for the following source units shall be:

| Source Unit | Pollutant | Maximum Allowable Emission Rate |
|---|---|---|
| Unit #1 2310 x $10^6$ BTU/hr Boiler | Particulate | 0.10 lb/$10^6$ BTU |
| | $SO_2$ | 3.0 lb/$10^6$ BTU |
| | Opacity | 20% |

| Source Unit | Pollutant | Maximum Allowable Emission Rate |
|---|---|---|
| Unit 2<br>4556 x $10^6$ BTU/hr<br>Boiler | Particulate<br>$SO_2$<br>Opacity | 0.10 lb/$10^6$ BTU<br>3.0 lb/$10^6$ BTU<br>20% |

B. Continuous emission monitoring and recording systems (CEM) to measure opacity from the main boiler stacks shall be calibrated, maintained, and operated by the owner or operator.

The monitoring and recording shall be in accordance with the requirements for Notification and Recordkeeping, Subsection 6 of Section 33-15-12-01 and Monitoring Requirements, Subsection 11 of Section 33-15-12-01 of the North Dakota Air Pollution Control Rules.

Quarterly excess emission reports shall be submitted by the 30th day following the end of each calendar quarter. The reports shall include those items identified in Subsection 6 of Section 33-15-12-01 (Notification and Recordkeeping) of the North Dakota Air Pollution Control Rules. Excess emissions are defined as any six-minute period during which the average opacity of emissions from the boiler exceeds 20% opacity except for one six-minute period per hour when the opacity may not exceed 40%.

C. At its discretion, the Department may require a performance audit of the continuous emission monitoring (CEM) system or a performance test of the source to ensure that the monitor is reporting accurately or to ensure compliance with emission limitations.

D. All reasonable precautions shall be taken by the owner/operator to prevent and/or minimize fugitive emissions from the operation of the source unit(s) identified under Item 6.

E. Emission inventory reports including, but not limited to process information regarding the amount and types of fuel used and production rate and air contaminant emissions shall be submitted to the Department, upon request, on forms supplied by the Department.

F. The owner/operator shall operate the source unit(s) described in Item 6 of this permit in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or renewal application(s) submitted thereafter.

G. Any alteration, rebuilding, repairing, expansion, change in the method of operation, or change of location of the source which results in the emission of an additional type or greater amount

of air contaminants or which results in an increase in the ambient concentration of any air contaminant, must be reviewed and approved by the Department prior to the start of such alteration, rebuilding, repairing, expansion, change in the method of operation, or change of location.

H. This Permit to Operate shall in no way permit or authorize the maintenance of a nuisance or a danger to public health or safety.

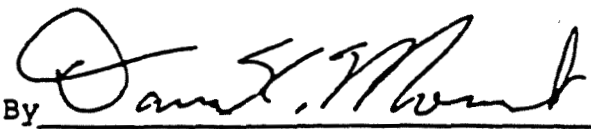
I. This Permit to Operate shall be effective from the date of its issuance until the date specified in Item 5 unless sooner suspended, revoked or surrendered. Application for renewal of this permit shall be submitted sixty days prior to such expiration date. The Department shall approve or disapprove the renewal of the Permit to Operate within sixty days of receipt of the renewal application.

J. This permit may not be transferred and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit.

K. This Permit to Operate is issued in reliance upon the accuracy and completeness of the information set forth in the application. The conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has, or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23-25. Each and every condition of this permit is a material part thereof, and is not severable.

FOR THE NORTH DAKOTA STATE
DEPARTMENT OF HEALTH AND
CONSOLIDATED LABORATORIES

Date 3/12/90

By 

Dana K. Mount, Director
Division of Environmental
Engineering

Title V - [redacted]
7-27-98



## 4. Emission Unit(s) Limits:

| Emission Unit | (EUI) | Emission Point Number | Pollutant/ Parameter | Emission Limit | NDAC Applicable Requirement |
|---|---|---|---|---|---|
| One Babcock and Wilcox pulverized coal-fired boiler with a rated heat input capacity of 2,622 x $10^6$ BTU/hr. | Unit 1 | EP1 | Particulate | 0.10 lb/$10^6$ BTU and 231 lb/hr (1-hr average) | 33-15-05-02.2.f |
| | | | $SO_2$ | 3 lb/$10^6$ BTU (1290 ng/J) and 6,930 lb/hr (3-hr rolling average) | 33-15-06-01.2 and Previous Permit to Operate |
| | | | Opacity | 20%* | 33-15-03-01.2 |
| One Babcock and Wilcox cyclone boiler with a rated maximum heat input capacity of 5.130 x $10^6$ BTU/hr. | Unit 2 | EP2 | Particulate | 0.10 lb/$10^6$ BTU and 456 lb/hr (1-hr average) | 33-15-05-02.2.f |
| | | | $SO_2$ | 3 lb/$10^6$ BTU (1290 ng/J) and 13,668 lb/hr (3-hr rolling average) | 33-15-06-01.2 and Previous Permit to Operate |
| | | | Opacity | 20%* | 33-15-03-02 |
| One auxiliary boiler with a rated maximum heat input capacity of 51.6 x $10^6$ BTU/hr fired with #2 fuel oil. | Auxiliary Boiler | EP3 | Particulate | 0.8 lb/$10^6$ BTU | 33-15-05-02.2a |
| | | | $SO_2$ | 3 lb/$10^6$ BTU (1290 ng/j)*** | 33-15-06-01.2 |
| | | | Opacity | 40%** | 33-15-03-01 |
| One No. 2 fuel oil-fired diesel engine with a rated capacity of 200 horsepower. | Emergency Fire Pump Engine | EP5 | Opacity | 40%** | 33-15-03-01 |
| One coal handling system with emissions from the following areas: | | | | | |
| Transfer Tower G | M1 | M1 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-01.2 |
| Reclaim tunnel surge chute building. | M2 | M2 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-01.2 |
| Crusher house (east). | M3 | M3 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-01.2 |
| Crusher house (west). | M4 | M4 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-01.2 |
| Transfer tower. | M5 | M5 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-01.2 |
| Unit 1 bunker house transfer conveyors. | M6 | M6 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-01.2 |
| Unit 2 east bunker loading conveyor. | M7 | M7 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-02 |
| Unit 2 west bunker loading conveyor. | M8 | M8 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-02 |
| Unit 2 bunker house transfer conveyor 2B2 (west). | M9 | M9 | Particulate<br>Opacity | 1.0 lb/hr****<br>20%* | Title V Application<br>33-15-03-02 |